

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,690	············	10/29/2003	Yasuhiro Mori	51319-62	5074
29619	7590	07/07/2006		EXAMINER	
		& ZABEL LLP	BOES, TI	BOES, TERENCE	
ATTN: JOEL E. LUTZKER 919 THIRD AVENUE				ART UNIT	PAPER NUMBER
NEW YOR	K, NY 1	0022	3682		
			DATE MAILED: 07/07/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/695,690	MORI ET AL.			
Office A	Action Summary	Examiner	Art Unit			
		Terence Boes	3682			
	G DATE of this communication app	pears on the cover sheet with the c	orrespondence address			
Period for Reply		V 10 057 TO EVENE • MONTH	O) OD TUIDTY (00) DAYO			
WHICHEVER IS L - Extensions of time may after SIX (6) MONTHS - If NO period for reply is - Failure to reply within the Any reply received by the	TATUTORY PERIOD FOR REPL' ONGER, FROM THE MAILING Do be available under the provisions of 37 CFR 1.1 from the mailing date of this communication. specified above, the maximum statutory period of the set or extended period for reply will, by statute the Office later than three months after the mailing strment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1) Responsive	to communication(s) filed on 31 M	larch 2004.				
2a) This action is	s FINAL . 2b)⊠ This	action is non-final.				
3)☐ Since this ap	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	5					
4)⊠ Claim(s) <u>1-9</u>	is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9</u>	-					
•	is/are objected to.					
8) Claim(s)	are subject to restriction and/o	r election requirement.				
Application Papers						
9) The specifica	ition is objected to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>10/29/03</u> is/are: a) a	ccepted or b) objected to by th	e Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)∐ The oath or o	leclaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S	.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1.⊠ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References		4) Interview Summary				
	n's Patent Drawing Review (PTO-948) e Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)			
Paper No(s)/Mail Date		6) Other:				

Art Unit: 3682

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figures 2-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: The term "(correct?)" (P2/L2) appears to be an editing typo.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Art Unit: 3682

4. Claims 2, and 4-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 and 4, the recitation "...one sided rattle..." renders the claim indefinite. While one-sided rattle is defined by the specification as the sum axial clearance and axial elastic deformation, neither axial clearance nor axial elastic deformation is defined, rendering the claim indefinite.

Regarding claim 6, the recitations "... the outer ring..." and "... the inner ring..." renders the claim indefinite, as it is unclear as to which bearing the rings pertain.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-8, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Mouri et al. USP 6,010,247.

Mouri discloses:

- A shaft (9)
- A first bearing mounted on the shaft (12)
- A second bearing mounted on the shaft (13)
- Wherein the first bearing and the second bearing each further comprises:
 - o An outer ring (12b)

Art Unit: 3682

o An inner ring (12a)

Wherein only one edge of the outer ring and the inner ring are aligned

(see figure 4)

Re clm 2,

Wherein for each bearing the outer ring is wider than the inner ring by a

length greater than a one sided rattle of the bearing (see fig 4, space

appears larger than sided rattle, as best understood)

Re clm 3,

• Wherein the first and the second bearings are mounted on the shaft such

that the outer rings of the first and the second bearing touch and a space

is formed between the inner rings of the first and the second bearings (see

fig 4)

Re clm 4,

• Wherein the spaced formed between the inner rings of the first and the

second bearings is larger than the sum of one sided rattle for the first and

the second bearing. (see fig 4, space appears larger than sum of one

sided rattles, as best understood)

Re clm 5,

A first race (race is adjacent balls 12c, 13c) formed on the outer ring

• A second race (race is adjacent balls 12c, 13c) formed on the inner ring

• Rolling elements (12c, 13c) placed between the first race and the second

race.

Art Unit: 3682

Re clm 6,

 Wherein the first race is formed closer to one edge of the outer ring (see figure 11).

Re clm 7

• Wherein the rolling elements are balls (see figure 4)

Re clm 8

 Wherein rolling elements are rollers (balls can roll and are considered rollers)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mouri et al. USP 6,010,247 in view of Schwinghammer USP 6,322,254.

Mouri discloses all of the claimed subject matter as described above. Mouri does not disclose a shield mounted in each of the first and second bearing.

Schwinghammer teaches a shield (9) mounted in each of the first and second bearing for the purpose of preventing an escape of lubricant (C4/L15-20).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the teachings of Mouri and provide a shield mounted in each of

Art Unit: 3682

the first and second bearing, as taught by Schwinghammer, for the purpose of preventing an escape of lubricant

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TB 6/30/06

RICHARD RIDLEY
SUPERINGENT EXAMINER